

News

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PRODUCTIVITY AND COSTS: MANUFACTURING INDUSTRIES, 1990-99

Labor productivity rose in 1999 in more than two-thirds of 119 U.S. manufacturing industries, the Bureau of Labor Statistics of the U.S. Department of Labor reported. Slightly more than half of the industries registering productivity growth also posted declines in unit labor costs.

In 1999, the most recent year for which underlying data are available for manufacturing industries, labor productivity—defined as output per hour—increased in 70 percent of the manufacturing industries. Output rose in 61 percent of the industries, while hours rose in 33 percent of the industries.

The share of industries with productivity increases during the 1990-99 period was even greater. From 1990 to 1999, labor productivity increased in 93 percent of the manufacturing industries. Output rose in 85 percent of the industries, and hours rose in 45 percent of them.

The attached tables present data for manufacturing industries for which BLS publishes productivity series at the 3-digit level of the Standard Industrial Classification (SIC) Manual. Although the analysis that follows focuses on industries at the 3-digit level, BLS also publishes productivity series at the 2- and 4-digit level for manufacturing, as well as for service-producing and mining industries. (See Technical Note.)

1998-99 Changes

In 1999, labor productivity increased in 83 of the 119 manufacturing industries for which BLS publishes data at the 3-digit level (Table 1). Over half of the gains were greater than 2.5 percent: Double-digit productivity growth occurred in 18 industries; an additional 27 industries posted labor productivity growth in the 5.0-9.9 percent range; and 14 industries had increases in the 2.6-4.9 percent range.

Four out of the five largest manufacturing industries, those with more than 500,000 employees, recorded growth in output per hour in 1999. Of these, the largest labor productivity gain occurred in electronic components and accessories (SIC 367) with an increase of 39.3 percent followed by a 9.0 percent increase in motor vehicles and equipment (SIC 371); a 5.5 percent increase in miscellaneous plastics products, n.e.c. (SIC 308); and a 4.8 percent increase in commercial printing (SIC 275). Labor productivity declined by 0.1 percent in meat products (SIC 201).

Unit labor costs, the ratio of total compensation to output, fell in 50 of the 119 industries in the manufacturing sector in 1999 (Table 2). The largest declines were computer and office equipment (SIC 357) (-24.8 percent); women's and children's undergarments (SIC 234) (-22.9 percent); electronic components and accessories (SIC 367) (-21.7 percent); and photographic equipment and supplies (SIC 386) (-14.3 percent). Over half of the manufacturing industries with increasing productivity (44 of 83) also registered decreasing unit labor costs.

Long-Term Trends

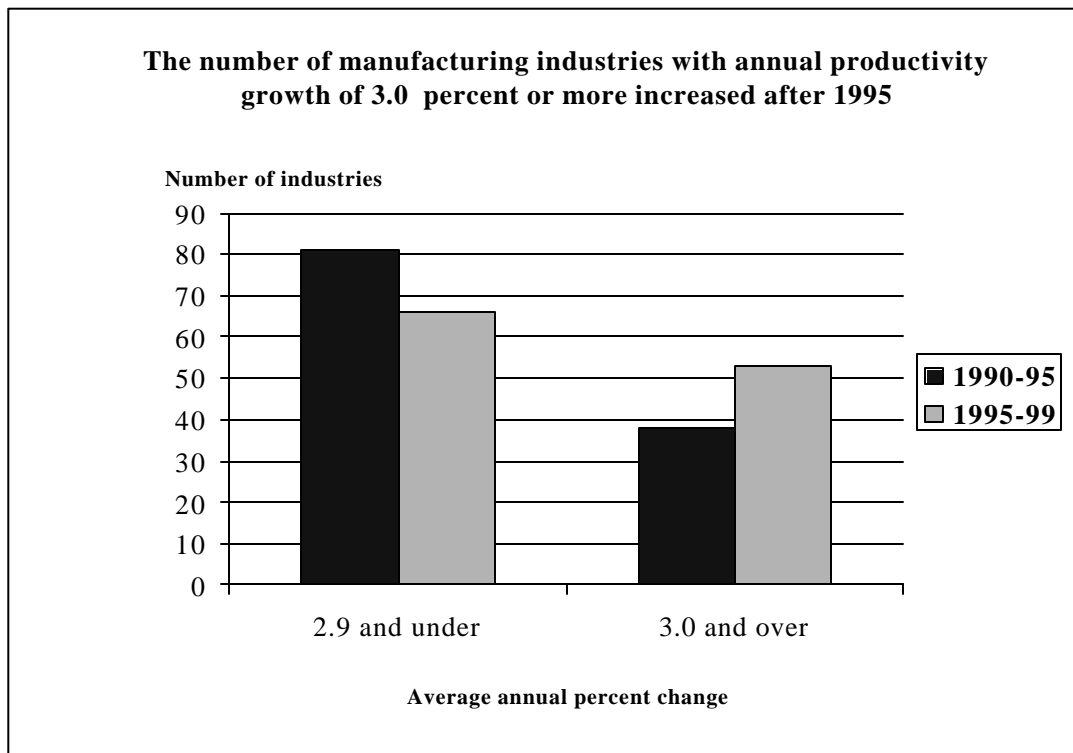
Almost all of the manufacturing industries posted productivity gains from 1990 to 1999. Output per hour increased in 111 of the 119 industries. Productivity advanced at least 5.0 percent per year in 12 industries. Another 49 industries experienced annual productivity growth in the 2.5-4.9 percent range. Computer and office equipment (SIC 357) posted the largest average annual gain, 33.3 percent. The five largest manufacturing industries all registered growth in output per hour from 1990 to 1999. Labor productivity rose 26.0 percent in electronic components and accessories (SIC 367); 3.3 percent in miscellaneous plastics products, n.e.c. (SIC 308); 3.2 percent in motor vehicles and equipment (SIC 371); 1.3 percent in commercial printing (SIC 275); and 0.6 percent in meat products (SIC 201).

From 1990 to 1999, unit labor costs fell in 34 of the 119 industries in the manufacturing sector. Of the 34 industries, only pulp mills (SIC 261) had decreasing labor productivity (-3.0 percent). The largest declines in unit labor costs were computer and office equipment (SIC 357) (-22.3 percent) and electronic components and accessories (SIC 367) (-17.6 percent).

In the early years of the period, 1990-95, output per hour increased in 106 of the 119 industries (Table 3). In 20 industries, productivity advanced 5.0 percent per year or

more. An additional 36 industries experienced annual productivity growth in the 2.5-4.9 percent range.

Productivity growth rates accelerated as the economic expansion continued (Chart). Comparing the 1990-95 period with the 1995-99 period, productivity growth rates increased in 72 of the 119 industries. In 14 industries, annual output per hour grew at least 5.0 percentage points faster in 1995-99 than in 1990-95. Another 24 industries posted annual productivity growth rates 2.0-4.9 percentage points above their 1990-95 rates. All 13 of the industries that experienced productivity declines in the earlier period registered productivity improvements in the later period. Seven of these 13 industries experienced positive productivity growth in the 1995-99 period.



The number of industries with declining unit labor costs rose as the economic expansion continued (Table 4). The proportion of manufacturing industries with falling unit labor costs increased from 26 percent in the 1990-95 period to 45 percent in the 1995-99 period.

Technical Note

Revisions

The data in this news release reflect revisions to series as published in table 42 of the *Monthly Labor Review* and in the news release *Productivity and Costs: Manufacturing Industries, 1990-98*, November 2000. The revised series can be obtained in several ways: by visiting the Industry Productivity web site

(<http://www.bls.gov/iprhome.htm>); by calling the Division of Industry Productivity Studies (202-691-5618); or by sending a request by e-mail (dipsweb@bls.gov).

Industry output indexes are prepared from basic data published by various public and private agencies, using the greatest level of detail available. Data from the Bureau of the Census, U.S. Department of Commerce, are used extensively in developing output statistics for manufacturing, trade, and service-producing industries. Data from the 1997 Economic Census of Manufactures were published primarily on the basis of the new North American Industry Classification System (NAICS); earlier censuses were published according to the Standard Industrial Classification (SIC) system. Implementation of NAICS by Federal agencies will be in phases. In order to update the productivity series for this news release, BLS converted the NAICS-based manufacturing data to an SIC basis. BLS will continue to publish the productivity series on an SIC basis until all the data underlying the productivity series have been converted to a NAICS basis.

All of the measures for 1999 in this news release are preliminary and subject to revision.

Productivity measurement

The industry productivity measures describe the relationship between output and the labor time involved in its production. They show the changes from period to period in the amount of goods and services produced per hour. Although these measures relate output to hours of employees or all persons engaged in an industry, they do not measure the specific contribution of labor, capital, or any other factor of production. Rather, they reflect the joint effects of many influences, including changes in technology; capital investment; level of output; utilization of capacity, energy, and materials; the organization of production; managerial skill; and the characteristics and effort of the workforce.

Year-to-year movements in productivity measures for some industries might be somewhat erratic, particularly in the smaller industries. The annual changes in an industry's productivity are based on sample data, which are likely to differ from data generated by a census of establishments in the industry. As a result, long-term trends tend to be more reliable indicators of the performance of an industry than are the year-to-year changes.

Unit labor cost measurement

The unit labor cost series in this release describe the cost of labor input required to produce one unit of output. Unit labor costs are calculated as the ratio of current dollar labor compensation to constant dollar output. The indexes of unit labor costs for each

industry are computed by dividing an index of current dollar compensation by an index of constant dollar output.

Compensation is a measure of the cost to the employer of securing the services of labor. It is defined as payroll plus supplemental payments. Payroll includes salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind. Supplemental payments are divided into legally required expenditures and payments for voluntary programs. The legally required expenditures include employers' contributions to Social Security, unemployment insurance taxes, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation, such as the employer portion of private health insurance and pension plans.

The indexes of industry output used in measuring labor productivity and unit labor costs are, wherever possible, calculated with a Tornqvist formula. This formula aggregates the growth rates of the various industry products between two periods using the products' shares in industry value of production, averaged over the two periods, as weights.

Published productivity and unit labor cost data for 2-, 3-, and 4-digit SIC industries in the goods-producing and service-producing sectors are available on the Internet at <http://www.bls.gov/iprhome.htm>. Productivity series for additional industries have been withheld from publication because they do not meet BLS publication standards. Unpublished data can be requested by phoning 202-691-5618 or by sending e-mail to dipsweb@bls.gov.

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200; TDD message referral phone number: 1-800-877-8339.

Table 1. Annual percent change in output per hour and related series: manufacturing industries, 1990-99 and 1998-99

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Output per hour	Output	Employee hours	Output per hour	Output	Employee hours
201	Meat products	504	0.6	3.0	2.4	-0.1	3.0	3.1
202	Dairy products	143	0.7	0.2	-0.5	-4.4	-1.4	3.1
203	Preserved fruits and vegetables	226	2.6	1.6	-0.9	1.9	-0.4	-2.3
204	Grain mill products	125	2.4	2.1	-0.3	3.3	1.3	-2.0
205	Bakery products	202	1.7	1.3	-0.3	6.6	5.2	-1.3
206	Sugar and confectionery products	92	2.6	1.7	-0.9	5.6	-0.7	-6.0
207	Fats and oils	29	3.1	1.9	-1.2	13.7	3.1	-9.3
208	Beverages	183	1.4	1.6	0.2	-2.9	-2.5	0.5
209	Miscellaneous food and kindred products	174	1.8	1.4	-0.4	3.3	1.7	-1.5
211	Cigarettes	26	2.0	-1.5	-3.5	-10.8	-11.3	-0.5
221	Broadwoven fabric mills, cotton	66	3.4	0.1	-3.1	1.9	-6.1	-7.8
222	Broadwoven fabric mills, manmade	58	5.0	2.0	-2.8	2.0	-3.9	-5.8
224	Narrow fabric mills	20	2.7	0.9	-1.8	4.0	1.1	-2.7
225	Knitting mills	141	3.4	-0.6	-3.9	6.6	-6.8	-12.5
226	Textile finishing, except wool	61	2.1	1.9	-0.3	1.9	-5.3	-7.1
227	Carpets and rugs	65	0.5	1.2	0.6	-4.4	-2.7	1.7
228	Yarn and thread mills	84	4.9	3.0	-1.8	10.8	6.8	-3.6
229	Miscellaneous textile goods	55	1.7	2.7	1.0	5.7	5.7	0.0
232	Men's and boys' furnishings	157	7.0	0.6	-6.0	7.0	-9.8	-15.7
233	Women's and misses' outerwear	205	5.9	1.0	-4.7	14.9	3.3	-10.1
234	Women's and children's undergarments	26	12.4	1.9	-9.4	35.4	13.4	-16.2
235	Hats, caps, and millinery	14	2.2	0.8	-1.4	9.3	-5.0	-13.0
238	Miscellaneous apparel and accessories	31	1.7	-2.2	-3.8	-1.8	-5.6	-3.9
239	Miscellaneous fabricated textile products	215	2.9	3.7	0.8	10.2	9.0	-1.1
242	Sawmills and planing mills	182	2.6	2.0	-0.6	5.6	5.6	0.0
243	Millwork, plywood, and structural members	323	-0.9	1.9	2.8	-0.7	4.4	5.1
244	Wood containers	57	-0.6	1.9	2.5	-1.4	1.3	2.8
245	Wood buildings and mobile homes	103	-0.7	5.5	6.3	-2.5	-1.7	0.7
249	Miscellaneous wood products	85	3.1	3.2	0.1	7.7	5.3	-2.3
251	Household furniture	290	2.3	2.6	0.2	2.3	3.8	1.4
252	Office furniture	75	1.6	3.3	1.6	-2.9	2.9	6.0
253	Public building and related furniture	52	6.5	12.0	5.2	1.6	11.6	9.9
254	Partitions and fixtures	90	3.2	5.1	1.9	1.1	-0.8	-1.9
259	Miscellaneous furniture and fixtures	41	1.9	3.1	1.2	0.7	4.1	3.4
261	Pulp mills	12	-3.0	-4.7	-1.8	2.1	0.6	-1.4
262	Paper mills	146	2.0	-0.2	-2.2	6.8	1.7	-4.8
263	Paperboard mills	48	3.0	1.8	-1.1	2.5	0.7	-1.8
265	Paperboard containers and boxes	219	1.3	2.0	0.7	0.1	0.3	0.2
267	Miscellaneous converted paper products	243	2.6	2.7	0.1	3.6	3.3	-0.3
271	Newspapers	442	-0.5	-1.3	-0.8	3.2	3.0	-0.2
272	Periodicals	144	2.3	3.4	1.1	0.1	3.6	3.5
273	Books	125	1.0	1.5	0.6	4.4	3.8	-0.6
274	Miscellaneous publishing	91	3.7	4.7	1.0	7.4	6.2	-1.1

See footnote at end of table.

Table 1. Annual percent change in output per hour and related series: manufacturing industries, 1990-99 and 1998-99--Continued

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Output per hour	Output	Employee hours	Output per hour	Output	Employee hours
275	Commercial printing	570	1.3	1.7	0.4	4.8	2.7	-2.0
276	Manifold business forms	43	-2.6	-4.2	-1.7	-4.0	-2.0	2.1
277	Greeting cards	26	0.4	0.7	0.3	-0.3	-5.1	-4.8
278	Blankbooks and bookbinding	63	2.4	1.2	-1.2	5.9	2.4	-3.3
279	Printing trade services	49	2.2	-0.6	-2.7	-4.9	-6.7	-1.9
281	Industrial inorganic chemicals	72	5.3	2.3	-2.9	17.1	3.1	-11.9
282	Plastics materials and synthetics	155	4.2	2.6	-1.5	2.5	0.5	-2.0
283	Drugs	295	0.1	2.6	2.5	0.5	5.2	4.7
284	Soaps, cleaners, and toilet goods	160	1.3	1.5	0.2	-4.8	-2.7	2.2
285	Paints and allied products	52	1.9	0.2	-1.6	-0.9	-0.7	0.2
286	Industrial organic chemicals	127	1.0	-1.1	-2.1	5.2	-0.5	-5.5
287	Agricultural chemicals	55	0.2	0.3	0.1	-9.0	-5.5	3.8
289	Miscellaneous chemical products	91	3.1	2.2	-0.9	6.1	2.4	-3.5
291	Petroleum refining	89	5.0	1.3	-3.5	8.8	-0.3	-8.4
295	Asphalt paving and roofing materials	31	1.9	3.3	1.4	-7.2	-2.8	4.7
299	Miscellaneous petroleum and coal products	14	-0.5	1.4	1.9	-7.9	-7.6	0.3
301	Tires and inner tubes	80	3.9	3.2	-0.7	0.9	-0.4	-1.3
305	Hose and belting and gaskets and packing	74	1.9	4.3	2.3	1.1	4.7	3.6
306	Fabricated rubber products, n.e.c.	107	2.9	3.4	0.5	6.4	3.4	-2.8
308	Miscellaneous plastics products, n.e.c.	740	3.3	5.3	2.0	5.5	6.0	0.4
314	Footwear, except rubber	33	3.0	-5.8	-8.5	18.6	7.3	-9.6
321	Flat glass	16	4.7	3.6	-1.1	12.0	5.6	-5.7
322	Glass and glassware, pressed or blown	64	3.6	0.7	-2.8	6.2	-2.8	-8.5
323	Products of purchased glass	64	4.2	5.5	1.3	9.8	11.8	1.8
324	Cement, hydraulic	17	2.4	2.4	0.0	4.2	2.4	-1.7
325	Structural clay products	32	1.4	0.6	-0.8	8.0	5.8	-2.0
326	Pottery and related products	38	2.3	2.6	0.3	-4.9	-4.8	0.1
327	Concrete, gypsum, and plaster products	240	1.3	3.3	2.1	1.4	5.4	4.0
329	Miscellaneous nonmetallic mineral products	73	2.1	1.8	-0.3	0.0	-2.5	-2.4
331	Blast furnace and basic steel products	228	3.5	1.6	-1.8	-1.4	-3.4	-2.1
332	Iron and steel foundries	128	1.9	2.0	0.1	4.2	0.7	-3.3
333	Primary nonferrous metals	37	2.8	0.5	-2.2	4.3	0.0	-4.1
335	Nonferrous rolling and drawing	168	3.2	3.1	0.0	6.5	4.6	-1.7
336	Nonferrous foundries (castings)	95	2.6	4.7	2.1	-0.6	1.4	1.9
339	Miscellaneous primary metal products	28	3.2	3.6	0.5	7.4	-1.6	-8.4
341	Metal cans and shipping containers	36	3.5	0.1	-3.3	-2.1	-1.6	0.6
342	Cutlery, handtools, and hardware	122	2.7	2.1	-0.6	7.1	3.4	-3.5
343	Plumbing and heating, except electric	59	2.4	2.8	0.4	-2.7	1.7	4.5
344	Fabricated structural metal products	484	1.5	3.1	1.6	0.0	2.7	2.7
346	Metal forgings and stampings	254	3.5	5.2	1.7	3.5	2.9	-0.6
347	Metal services, n.e.c.	143	2.3	4.4	2.1	0.5	-0.2	-0.8
348	Ordnance and accessories, n.e.c.	41	1.3	-5.1	-6.3	-4.6	-3.1	1.6
349	Miscellaneous fabricated metal products	271	1.4	3.0	1.6	-1.1	-1.5	-0.4
351	Engines and turbines	86	4.0	3.9	-0.1	3.7	6.2	2.4

See footnote at end of table.

Table 1. Annual percent change in output per hour and related series: manufacturing industries, 1990-99 and 1998-99--Continued

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Output per hour	Output	Employee hours	Output per hour	Output	Employee hours
352	Farm and garden machinery	99	0.8	0.0	-0.8	-15.5	-21.3	-6.8
353	Construction and related machinery	244	2.8	3.6	0.8	-0.2	-5.6	-5.5
354	Metalworking machinery	338	2.3	2.6	0.3	3.1	-1.9	-4.8
355	Special industry machinery	169	2.9	3.5	0.6	11.3	4.4	-6.3
356	General industrial machinery	255	1.0	1.4	0.4	0.2	-5.3	-5.5
357	Computer and office equipment	370	33.3	30.8	-1.9	36.3	31.0	-3.8
358	Refrigeration and service machinery	214	1.9	4.5	2.5	1.4	3.8	2.3
359	Industrial machinery, n.e.c.	367	2.5	4.2	1.6	5.3	1.4	-3.8
361	Electric distribution equipment	83	3.6	2.0	-1.6	-0.6	2.4	3.0
362	Electrical industrial apparatus	151	4.7	3.4	-1.3	0.4	-1.6	-2.0
363	Household appliances	118	4.0	3.7	-0.3	0.0	1.9	1.9
364	Electric lighting and wiring equipment	183	3.2	3.2	0.0	2.5	2.3	-0.2
366	Communications equipment	267	11.4	11.4	0.0	18.5	11.6	-5.8
367	Electronic components and accessories	636	26.0	27.5	1.2	39.3	34.7	-3.3
369	Miscellaneous electrical equipment & supplies	151	5.0	4.1	-0.8	4.0	5.5	1.4
371	Motor vehicles and equipment	1019	3.2	6.4	3.1	9.0	14.5	5.0
372	Aircraft and parts	495	3.9	-0.1	-3.9	-0.4	-7.7	-7.3
373	Ship and boat building and repairing	166	0.9	-0.3	-1.2	10.4	7.2	-2.9
374	Railroad equipment	37	4.2	5.5	1.2	8.5	3.6	-4.5
375	Motorcycles, bicycles, and parts	20	2.9	7.7	4.6	-5.0	-8.2	-3.4
376	Guided missiles, space vehicles, parts	88	3.5	-4.8	-8.0	11.1	5.9	-4.7
381	Search and navigation equipment	166	2.4	-3.5	-5.8	-6.2	-5.9	0.4
382	Measuring and controlling devices	294	4.1	3.0	-1.1	6.6	3.1	-3.3
384	Medical instruments and supplies	283	3.6	5.3	1.6	1.0	2.4	1.3
385	Ophthalmic goods	34	7.4	4.8	-2.3	15.3	9.8	-4.8
386	Photographic equipment & supplies	74	3.5	0.3	-3.1	17.9	8.0	-8.4
391	Jewelry, silverware, and plated ware	50	3.4	3.0	-0.3	18.4	16.8	-1.4
393	Musical instruments	17	-1.3	1.6	3.0	6.1	5.5	-0.6
394	Toys and sporting goods	105	1.5	1.9	0.3	-5.8	-6.1	-0.3
395	Pens, pencils, office, and art supplies	31	1.0	-0.4	-1.4	-2.4	-2.8	-0.4
396	Costume jewelry and notions	20	4.0	-2.2	-5.9	14.5	3.0	-10.0
399	Miscellaneous manufactures	173	0.5	3.0	2.5	2.5	4.4	1.8

¹ Employment figures are based on data from BLS sources.

Table 2. Annual percent change in total compensation, output, and unit labor costs: manufacturing industries, 1990-99 and 1998-99

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-99			Annual percent change 1998-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
201	Meat products	504	5.3	3.0	2.2	6.5	3.0	3.4
202	Dairy products	143	2.2	0.2	2.0	0.9	-1.4	2.3
203	Preserved fruits and vegetables	226	2.7	1.6	1.0	2.1	-0.4	2.5
204	Grain mill products	125	2.6	2.1	0.5	4.8	1.3	3.5
205	Bakery products	202	3.8	1.3	2.4	7.8	5.2	2.5
206	Sugar and confectionery products	92	2.4	1.7	0.8	0.5	-0.7	1.2
207	Fats and oils	29	2.5	1.9	0.5	5.3	3.1	2.2
208	Beverages	183	2.3	1.6	0.7	-0.3	-2.5	2.3
209	Miscellaneous food and kindred products	174	2.9	1.4	1.5	1.4	1.7	-0.4
211	Cigarettes	26	-0.4	-1.5	1.1	-4.8	-11.3	7.2
221	Broadwoven fabric mills, cotton	66	-0.6	0.1	-0.7	-8.9	-6.1	-2.9
222	Broadwoven fabric mills, manmade	58	1.1	2.0	-0.9	-8.9	-3.9	-5.1
224	Narrow fabric mills	20	3.0	0.9	2.1	2.4	1.1	1.3
225	Knitting mills	141	-0.6	-0.6	0.1	-7.0	-6.8	-0.3
226	Textile finishing, except wool	61	3.1	1.9	1.2	1.2	-5.3	6.9
227	Carpets and rugs	65	2.7	1.2	1.5	-2.5	-2.7	0.2
228	Yarn and thread mills	84	1.3	3.0	-1.7	-0.3	6.8	-6.6
229	Miscellaneous textile goods	55	4.1	2.7	1.4	4.7	5.7	-0.9
232	Men's and boys' furnishings	157	-1.5	0.6	-2.0	-7.6	-9.8	2.4
233	Women's and misses' outerwear	205	-1.7	1.0	-2.7	-10.1	3.3	-13.0
234	Women's and children's undergarments	26	-5.8	1.9	-7.6	-12.6	13.4	-22.9
235	Hats, caps, and millinery	14	3.5	0.8	2.8	3.5	-5.0	9.0
238	Miscellaneous apparel and accessories	31	-1.6	-2.2	0.6	3.6	-5.6	9.7
239	Miscellaneous fabricated textile products	215	5.7	3.7	1.9	9.7	9.0	0.6
242	Sawmills and planing mills	182	3.8	2.0	1.8	6.0	5.6	0.4
243	Millwork, plywood, and structural members	323	5.4	1.9	3.4	9.1	4.4	4.6
244	Wood containers	57	5.3	1.9	3.4	0.6	1.3	-0.8
245	Wood buildings and mobile homes	103	9.2	5.5	3.5	2.1	-1.7	3.9
249	Miscellaneous wood products	85	4.0	3.2	0.8	3.9	5.3	-1.3
251	Household furniture	290	3.7	2.6	1.1	4.9	3.8	1.0
252	Office furniture	75	3.4	3.3	0.1	0.9	2.9	-1.9
253	Public building and related furniture	52	10.4	12.0	-1.5	13.8	11.6	1.9
254	Partitions and fixtures	90	6.9	5.1	1.7	1.9	-0.8	2.7
259	Miscellaneous furniture and fixtures	41	4.6	3.1	1.4	7.9	4.1	3.6
261	Pulp mills	12	-5.9	-4.7	-1.2	-1.7	0.6	-2.3
262	Paper mills	146	0.8	-0.2	1.0	-1.6	1.7	-3.2
263	Paperboard mills	48	3.2	1.8	1.3	-0.7	0.7	-1.3
265	Paperboard containers and boxes	219	4.0	2.0	2.0	3.0	0.3	2.7
267	Miscellaneous converted paper products	243	3.9	2.7	1.2	2.3	3.3	-1.0
271	Newspapers	442	2.5	-1.3	3.8	4.8	3.0	1.8
272	Periodicals	144	7.9	3.4	4.4	5.1	3.6	1.5
273	Books	125	5.2	1.5	3.6	5.5	3.8	1.7
274	Miscellaneous publishing	91	10.3	4.7	5.3	8.2	6.2	1.9

See footnote at end of table.

Table 2. Annual percent change in total compensation, output, and unit labor costs: manufacturing industries, 1990-99 and 1998-99

Continued								
SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-99			Annual percent change 1998-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
275	Commercial printing	570	3.7	1.7	1.9	2.9	2.7	0.3
276	Manifold business forms	43	-1.1	-4.2	3.3	-3.2	-2.0	-1.2
277	Greeting cards	26	0.7	0.7	0.0	0.6	-5.1	6.0
278	Blankbooks and bookbinding	63	1.7	1.2	0.5	-1.8	2.4	-4.1
279	Printing trade services	49	-0.4	-0.6	0.2	-6.7	-6.7	0.0
281	Industrial inorganic chemicals	72	0.6	2.3	-1.6	-1.0	3.1	-4.0
282	Plastics materials and synthetics	155	1.6	2.6	-1.0	-2.1	0.5	-2.5
283	Drugs	295	5.7	2.6	3.0	6.9	5.2	1.7
284	Soaps, cleaners, and toilet goods	160	2.8	1.5	1.2	-0.8	-2.7	1.9
285	Paints and allied products	52	3.1	0.2	2.9	1.9	-0.7	2.6
286	Industrial organic chemicals	127	2.5	-1.1	3.6	-1.6	-0.5	-1.1
287	Agricultural chemicals	55	1.5	0.3	1.2	4.4	-5.5	10.5
289	Miscellaneous chemical products	91	3.2	2.2	1.0	3.1	2.4	0.6
291	Petroleum refining	89	2.5	1.3	1.2	-0.3	-0.3	0.1
295	Asphalt paving and roofing materials	31	2.9	3.3	-0.4	-1.4	-2.8	1.4
299	Miscellaneous petroleum and coal products	14	2.8	1.4	1.4	-4.2	-7.6	3.7
301	Tires and inner tubes	80	3.1	3.2	0.0	3.1	-0.4	3.5
305	Hose and belting and gaskets and packing	74	4.9	4.3	0.6	2.9	4.7	-1.8
306	Fabricated rubber products, n.e.c.	107	3.8	3.4	0.4	6.9	3.4	3.3
308	Miscellaneous plastics products, n.e.c.	740	5.6	5.3	0.3	5.3	6.0	-0.7
314	Footwear, except rubber	33	-4.3	-5.8	1.7	0.8	7.3	-6.1
321	Flat glass	16	0.6	3.6	-2.9	0.9	5.6	-4.4
322	Glass and glassware, pressed or blown	64	0.7	0.7	0.0	1.8	-2.8	4.8
323	Products of purchased glass	64	5.4	5.5	-0.1	8.3	11.8	-3.2
324	Cement, hydraulic	17	3.4	2.4	1.0	5.7	2.4	3.2
325	Structural clay products	32	1.4	0.6	0.8	5.1	5.8	-0.6
326	Pottery and related products	38	2.9	2.6	0.3	-0.7	-4.8	4.3
327	Concrete, gypsum, and plaster products	240	5.4	3.3	2.0	10.9	5.4	5.2
329	Miscellaneous nonmetallic mineral products	73	3.0	1.8	1.2	2.8	-2.5	5.4
331	Blast furnace and basic steel products	228	0.5	1.6	-1.1	-4.7	-3.4	-1.3
332	Iron and steel foundries	128	2.5	2.0	0.4	3.3	0.7	2.6
333	Primary nonferrous metals	37	-0.1	0.5	-0.6	-5.6	0.0	-5.6
335	Nonferrous rolling and drawing	168	3.1	3.1	0.0	0.4	4.6	-4.1
336	Nonferrous foundries (castings)	95	4.7	4.7	0.0	-0.5	1.4	-1.8
339	Miscellaneous primary metal products	28	3.2	3.6	-0.5	-3.6	-1.6	-2.1
341	Metal cans and shipping containers	36	-1.2	0.1	-1.2	0.2	-1.6	1.8
342	Cutlery, handtools, and hardware	122	2.8	2.1	0.6	2.1	3.4	-1.2
343	Plumbing and heating, except electric	59	4.1	2.8	1.2	4.4	1.7	2.6
344	Fabricated structural metal products	484	4.5	3.1	1.3	4.1	2.7	1.4
346	Metal forgings and stampings	254	3.5	5.2	-1.7	2.9	2.9	0.0
347	Metal services, n.e.c.	143	4.9	4.4	0.4	-0.6	-0.2	-0.4
348	Ordinance and accessories, n.e.c.	41	-6.0	-5.1	-1.0	-1.8	-3.1	1.3
349	Miscellaneous fabricated metal products	271	4.2	3.0	1.1	0.7	-1.5	2.2
351	Engines and turbines	86	1.6	3.9	-2.2	6.5	6.2	0.3

See footnote at end of table.

Table 2. Annual percent change in total compensation, output, and unit labor costs: manufacturing industries, 1990-99 and 1998-99
Continued

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-99			Annual percent change 1998-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
352	Farm and garden machinery	99	2.5	0.0	2.5	-8.5	-21.3	16.2
353	Construction and related machinery	244	3.6	3.6	0.0	0.5	-5.6	6.5
354	Metalworking machinery	338	3.6	2.6	1.1	-2.3	-1.9	-0.4
355	Special industry machinery	169	3.6	3.5	0.1	-2.1	4.4	-6.2
356	General industrial machinery	255	3.2	1.4	1.8	-1.8	-5.3	3.8
357	Computer and office equipment	370	1.7	30.8	-22.3	-1.4	31.0	-24.8
358	Refrigeration and service machinery	214	4.4	4.5	0.0	6.8	3.8	2.9
359	Industrial machinery, n.e.c.	367	4.7	4.2	0.5	-0.5	1.4	-1.9
361	Electric distribution equipment	83	2.6	2.0	0.6	3.6	2.4	1.2
362	Electrical industrial apparatus	151	3.5	3.4	0.1	1.8	-1.6	3.5
363	Household appliances	118	3.6	3.7	-0.1	1.9	1.9	0.1
364	Electric lighting and wiring equipment	183	2.9	3.2	-0.2	4.8	2.3	2.5
366	Communications equipment	267	5.5	11.4	-5.3	5.4	11.6	-5.5
367	Electronic components and accessories	636	5.1	27.5	-17.6	5.5	34.7	-21.7
369	Miscellaneous electrical equipment & supplies	151	2.0	4.1	-2.0	1.8	5.5	-3.5
371	Motor vehicles and equipment	1019	5.1	6.4	-1.3	9.9	14.5	-4.0
372	Aircraft and parts	495	-0.8	-0.1	-0.7	-2.8	-7.7	5.2
373	Ship and boat building and repairing	166	0.2	-0.3	0.5	5.6	7.2	-1.5
374	Railroad equipment	37	4.6	5.5	-0.9	5.0	3.6	1.4
375	Motorcycles, bicycles, and parts	20	12.5	7.7	4.5	-7.1	-8.2	1.2
376	Guided missiles, space vehicles, parts	88	-6.0	-4.8	-1.2	3.1	5.9	-2.6
381	Search and navigation equipment	166	-3.1	-3.5	0.4	-7.0	-5.9	-1.2
382	Measuring and controlling devices	294	2.4	3.0	-0.6	-0.7	3.1	-3.7
384	Medical instruments and supplies	283	6.2	5.3	0.9	2.4	2.4	0.1
385	Ophthalmic goods	34	3.3	4.8	-1.5	6.5	9.8	-3.0
386	Photographic equipment & supplies	74	-0.6	0.3	-0.9	-7.4	8.0	-14.3
391	Jewelry, silverware, and plated ware	50	2.3	3.0	-0.7	8.6	16.8	-7.1
393	Musical instruments	17	5.8	1.6	4.1	0.0	5.5	-5.2
394	Toys and sporting goods	105	3.2	1.9	1.3	-1.7	-6.1	4.6
395	Pens, pencils, office, and art supplies	31	1.8	-0.4	2.3	-0.8	-2.8	2.0
396	Costume jewelry and notions	20	-0.2	-2.2	2.0	1.8	3.0	-1.2
399	Miscellaneous manufactures	173	4.4	3.0	1.3	5.0	4.4	0.5

¹ Employment figures are based on data from BLS sources.

Table 3. Annual percent change in output per hour and related series: manufacturing industries, 1990-95 and 1995-99

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Output per hour	Output	Employee hours	Output per hour	Output	Employee hours
201	Meat products	504	1.1	3.6	2.6	0.0	2.2	2.2
202	Dairy products	143	1.7	1.0	-0.6	-0.5	-0.9	-0.4
203	Preserved fruits and vegetables	226	2.7	2.3	-0.3	2.4	0.8	-1.6
204	Grain mill products	125	1.8	2.1	0.3	3.1	2.2	-0.9
205	Bakery products	202	1.0	0.9	-0.1	2.5	1.8	-0.7
206	Sugar and confectionery products	92	1.0	1.0	0.1	4.7	2.5	-2.1
207	Fats and oils	29	0.4	0.4	0.1	6.7	3.9	-2.7
208	Beverages	183	2.7	1.8	-0.8	-0.2	1.4	1.6
209	Miscellaneous food and kindred products	174	0.7	0.9	0.2	3.1	1.9	-1.1
211	Cigarettes	26	4.8	1.0	-3.6	-1.3	-4.5	-3.3
221	Broadwoven fabric mills, cotton	66	5.4	3.2	-2.1	0.9	-3.6	-4.4
222	Broadwoven fabric mills, manmade	58	5.5	3.5	-1.9	4.3	0.1	-4.0
224	Narrow fabric mills	20	4.3	3.2	-1.0	0.7	-1.9	-2.7
225	Knitting mills	141	5.2	4.6	-0.6	1.2	-6.8	-7.9
226	Textile finishing, except wool	61	-1.2	1.8	3.0	6.5	2.0	-4.3
227	Carpets and rugs	65	0.6	1.2	0.6	0.5	1.2	0.6
228	Yarn and thread mills	84	4.5	3.3	-1.2	5.4	2.7	-2.5
229	Miscellaneous textile goods	55	2.5	3.2	0.6	0.7	2.1	1.4
232	Men's and boys' furnishings	157	3.9	2.2	-1.6	11.0	-1.4	-11.2
233	Women's and misses' outerwear	205	5.4	2.5	-2.8	6.5	-0.9	-7.0
234	Women's and children's undergarments	26	9.6	3.8	-5.2	16.1	-0.5	-14.3
235	Hats, caps, and millinery	14	-1.1	3.2	4.4	6.6	-2.1	-8.2
238	Miscellaneous apparel and accessories	31	5.2	1.0	-4.0	-2.5	-6.0	-3.6
239	Miscellaneous fabricated textile products	215	1.8	3.6	1.8	4.3	3.8	-0.5
242	Sawmills and planing mills	182	2.0	1.0	-1.0	3.3	3.2	0.0
243	Millwork, plywood, and structural members	323	-1.1	0.6	1.7	-0.6	3.6	4.2
244	Wood containers	57	-0.9	1.4	2.3	-0.3	2.5	2.8
245	Wood buildings and mobile homes	103	-1.2	5.9	7.2	0.0	5.0	5.1
249	Miscellaneous wood products	85	1.4	2.1	0.7	5.2	4.6	-0.5
251	Household furniture	290	2.3	1.7	-0.5	2.4	3.7	1.2
252	Office furniture	75	1.3	0.0	-1.3	2.1	7.5	5.3
253	Public building and related furniture	52	7.7	13.7	5.6	5.0	10.0	4.7
254	Partitions and fixtures	90	1.1	3.4	2.2	5.9	7.4	1.5
259	Miscellaneous furniture and fixtures	41	1.2	1.5	0.3	2.8	5.1	2.3
261	Pulp mills	12	2.5	1.1	-1.4	-9.5	-11.6	-2.3
262	Paper mills	146	3.0	1.2	-1.8	0.8	-2.0	-2.8
263	Paperboard mills	48	3.5	2.9	-0.5	2.3	0.5	-1.8
265	Paperboard containers and boxes	219	0.7	1.8	1.0	1.9	2.2	0.2
267	Miscellaneous converted paper products	243	2.2	2.4	0.1	3.0	3.0	0.1
271	Newspapers	442	-2.7	-3.9	-1.2	2.2	2.0	-0.2
272	Periodicals	144	-1.3	-1.2	0.2	7.0	9.3	2.2
273	Books	125	1.0	1.8	0.8	0.9	1.2	0.3
274	Miscellaneous publishing	91	0.6	1.2	0.6	7.9	9.3	1.4

See footnote at end of table.

Table 3. Annual percent change in output per hour and related series: manufacturing industries, 1990-95 and 1995-99--Continued

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Output per hour	Output	Employee hours	Output per hour	Output	Employee hours
275	Commercial printing	570	0.9	1.5	0.6	1.8	2.1	0.3
276	Manifold business forms	43	-3.7	-5.8	-2.1	-1.1	-2.2	-1.1
277	Greeting cards	26	-1.7	-1.1	0.5	2.9	3.0	0.0
278	Blankbooks and bookbinding	63	1.8	1.6	-0.2	3.2	0.7	-2.5
279	Printing trade services	49	3.3	0.0	-3.2	0.8	-1.3	-2.1
281	Industrial inorganic chemicals	72	0.5	-1.5	-2.0	11.8	7.3	-4.0
282	Plastics materials and synthetics	155	4.9	2.8	-2.0	3.2	2.3	-0.9
283	Drugs	295	0.9	2.9	1.9	-0.9	2.3	3.2
284	Soaps, cleaners, and toilet goods	160	2.7	1.9	-0.8	-0.4	1.1	1.4
285	Paints and allied products	52	2.1	0.3	-1.8	1.6	0.1	-1.4
286	Industrial organic chemicals	127	-0.6	-1.7	-1.2	3.1	-0.3	-3.3
287	Agricultural chemicals	55	0.7	-0.1	-0.8	-0.4	0.8	1.2
289	Miscellaneous chemical products	91	2.1	0.9	-1.1	4.4	3.7	-0.7
291	Petroleum refining	89	3.9	1.2	-2.7	6.4	1.5	-4.6
295	Asphalt paving and roofing materials	31	2.6	2.0	-0.6	1.0	4.9	3.9
299	Miscellaneous petroleum and coal products	14	-1.6	0.9	2.6	0.9	2.0	1.0
301	Tires and inner tubes	80	4.9	4.4	-0.5	2.6	1.6	-1.0
305	Hose and belting and gaskets and packing	74	1.7	4.0	2.3	2.2	4.6	2.4
306	Fabricated rubber products, n.e.c.	107	2.2	3.6	1.4	3.7	3.2	-0.6
308	Miscellaneous plastics products, n.e.c.	740	2.7	5.6	2.7	3.9	5.1	1.1
314	Footwear, except rubber	33	3.0	-3.6	-6.4	3.0	-8.5	-11.1
321	Flat glass	16	3.3	1.7	-1.6	6.4	5.9	-0.5
322	Glass and glassware, pressed or blown	64	2.0	0.2	-1.8	5.6	1.4	-4.0
323	Products of purchased glass	64	2.8	4.0	1.3	6.0	7.4	1.3
324	Cement, hydraulic	17	2.0	2.1	0.1	3.0	2.8	-0.1
325	Structural clay products	32	0.6	0.0	-0.5	2.4	1.3	-1.1
326	Pottery and related products	38	2.1	4.1	1.9	2.5	0.8	-1.7
327	Concrete, gypsum, and plaster products	240	0.4	0.6	0.2	2.3	6.9	4.5
329	Miscellaneous nonmetallic mineral products	73	2.5	2.2	-0.2	1.5	1.2	-0.3
331	Blast furnace and basic steel products	228	5.4	3.1	-2.2	1.1	-0.3	-1.3
332	Iron and steel foundries	128	1.2	1.9	0.7	2.9	2.1	-0.7
333	Primary nonferrous metals	37	1.7	-1.3	-2.9	4.3	2.8	-1.4
335	Nonferrous rolling and drawing	168	1.4	1.3	0.0	5.5	5.4	0.0
336	Nonferrous foundries (castings)	95	2.5	4.1	1.5	2.6	5.5	2.8
339	Miscellaneous primary metal products	28	6.0	7.6	1.5	-0.3	-1.1	-0.8
341	Metal cans and shipping containers	36	4.2	-0.6	-4.6	2.7	0.9	-1.8
342	Cutlery, handtools, and hardware	122	2.7	2.6	-0.1	2.7	1.5	-1.2
343	Plumbing and heating, except electric	59	1.2	0.8	-0.5	3.8	5.4	1.5
344	Fabricated structural metal products	484	1.4	1.8	0.4	1.6	4.7	3.1
346	Metal forgings and stampings	254	2.7	6.0	3.2	4.5	4.2	-0.3
347	Metal services, n.e.c.	143	4.1	5.7	1.6	0.1	2.9	2.8
348	Ordnance and accessories, n.e.c.	41	1.3	-6.1	-7.4	1.3	-3.7	-4.9
349	Miscellaneous fabricated metal products	271	1.8	3.4	1.6	0.9	2.5	1.6
351	Engines and turbines	86	2.9	3.1	0.3	5.4	4.9	-0.5

See footnote at end of table.

Table 3. Annual percent change in output per hour and related series: manufacturing industries, 1990-95 and 1995-99--Continued

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Output per hour	Output	Employee hours	Output per hour	Output	Employee hours
352	Farm and garden machinery	99	2.9	2.1	-0.8	-1.8	-2.6	-0.8
353	Construction and related machinery	244	2.7	2.7	0.1	3.0	4.6	1.6
354	Metalworking machinery	338	2.6	3.7	1.1	1.9	1.1	-0.7
355	Special industry machinery	169	4.2	6.3	2.0	1.3	0.2	-1.1
356	General industrial machinery	255	1.4	2.4	0.9	0.5	0.2	-0.3
357	Computer and office equipment	370	27.7	22.6	-4.0	40.7	41.9	0.8
358	Refrigeration and service machinery	214	1.7	5.3	3.6	2.3	3.4	1.2
359	Industrial machinery, n.e.c.	367	5.3	6.7	1.4	-0.8	1.1	1.9
361	Electric distribution equipment	83	6.1	2.9	-3.0	0.6	0.9	0.3
362	Electrical industrial apparatus	151	7.0	5.5	-1.4	1.9	0.8	-1.1
363	Household appliances	118	3.8	3.8	0.0	4.2	3.6	-0.6
364	Electric lighting and wiring equipment	183	2.6	2.0	-0.6	3.9	4.6	0.7
366	Communications equipment	267	10.1	10.3	0.2	13.0	12.7	-0.3
367	Electronic components and accessories	636	24.7	25.0	0.3	27.8	30.7	2.3
369	Miscellaneous electrical equipment & supplies	151	4.7	3.9	-0.8	5.4	4.4	-0.9
371	Motor vehicles and equipment	1019	0.8	5.5	4.6	6.4	7.6	1.2
372	Aircraft and parts	495	1.7	-7.2	-8.8	6.7	9.5	2.7
373	Ship and boat building and repairing	166	-1.1	-3.8	-2.7	3.5	4.2	0.7
374	Railroad equipment	37	1.2	5.0	3.8	8.1	6.0	-1.9
375	Motorcycles, bicycles, and parts	20	5.1	14.4	8.8	0.2	-0.2	-0.4
376	Guided missiles, space vehicles, parts	88	0.8	-11.2	-11.9	6.9	3.7	-3.0
381	Search and navigation equipment	166	5.8	-5.5	-10.7	-1.7	-0.9	0.8
382	Measuring and controlling devices	294	6.6	4.3	-2.1	1.1	1.4	0.3
384	Medical instruments and supplies	283	2.4	3.8	1.4	5.1	7.1	1.9
385	Ophthalmic goods	34	6.7	3.5	-3.0	8.2	6.6	-1.5
386	Photographic equipment & supplies	74	3.7	0.8	-2.8	3.2	-0.3	-3.4
391	Jewelry, silverware, and plated ware	50	0.2	-0.4	-0.6	7.5	7.4	-0.1
393	Musical instruments	17	-2.2	1.1	3.3	-0.1	2.4	2.5
394	Toys and sporting goods	105	1.0	3.7	2.7	2.2	-0.4	-2.5
395	Pens, pencils, office, and art supplies	31	2.7	1.0	-1.7	-1.1	-2.2	-1.1
396	Costume jewelry and notions	20	6.4	0.6	-5.4	1.1	-5.5	-6.6
399	Miscellaneous manufactures	173	0.3	2.1	1.8	0.7	4.3	3.5

¹ Employment figures are based on data from BLS sources.

Table 4. Annual percent change in total compensation, output, and unit labor costs: manufacturing industries, 1990-95 and 1995-99

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-95			Annual percent change 1995-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
201	Meat products	504	5.0	3.6	1.3	5.7	2.2	3.5
202	Dairy products	143	2.6	1.0	1.5	1.8	-0.9	2.7
203	Preserved fruits and vegetables	226	3.3	2.3	0.9	2.0	0.8	1.2
204	Grain mill products	125	2.9	2.1	0.8	2.1	2.2	0.0
205	Bakery products	202	3.5	0.9	2.5	4.1	1.8	2.3
206	Sugar and confectionery products	92	2.6	1.0	1.6	2.2	2.5	-0.2
207	Fats and oils	29	1.0	0.4	0.5	4.4	3.9	0.5
208	Beverages	183	1.9	1.8	0.0	2.9	1.4	1.5
209	Miscellaneous food and kindred products	174	3.0	0.9	2.0	2.7	1.9	0.8
211	Cigarettes	26	0.2	1.0	-0.7	-1.3	-4.5	3.4
221	Broadwoven fabric mills, cotton	66	2.6	3.2	-0.5	-4.4	-3.6	-0.8
222	Broadwoven fabric mills, manmade	58	2.7	3.5	-0.7	-1.0	0.1	-1.1
224	Narrow fabric mills	20	4.9	3.2	1.6	0.7	-1.9	2.7
225	Knitting mills	141	2.8	4.6	-1.7	-4.6	-6.8	2.3
226	Textile finishing, except wool	61	5.5	1.8	3.7	0.2	2.0	-1.8
227	Carpets and rugs	65	4.7	1.2	3.4	0.2	1.2	-0.9
228	Yarn and thread mills	84	1.4	3.3	-1.8	1.1	2.7	-1.6
229	Miscellaneous textile goods	55	6.2	3.2	3.0	1.4	2.1	-0.6
232	Men's and boys' furnishings	157	1.1	2.2	-1.1	-4.6	-1.4	-3.2
233	Women's and misses' outerwear	205	2.1	2.5	-0.4	-6.4	-0.9	-5.5
234	Women's and children's undergarments	26	-1.0	3.8	-4.6	-11.6	-0.5	-11.1
235	Hats, caps, and millinery	14	6.2	3.2	3.0	0.3	-2.1	2.5
238	Miscellaneous apparel and accessories	31	-0.5	1.0	-1.5	-2.9	-6.0	3.2
239	Miscellaneous fabricated textile products	215	5.8	3.6	2.1	5.6	3.8	1.7
242	Sawmills and planing mills	182	3.8	1.0	2.8	3.8	3.2	0.5
243	Millwork, plywood, and structural members	323	4.7	0.6	4.1	6.3	3.6	2.6
244	Wood containers	57	6.3	1.4	4.9	4.1	2.5	1.5
245	Wood buildings and mobile homes	103	8.8	5.9	2.7	9.8	5.0	4.6
249	Miscellaneous wood products	85	3.4	2.1	1.3	4.9	4.6	0.3
251	Household furniture	290	3.1	1.7	1.4	4.5	3.7	0.8
252	Office furniture	75	1.8	0.0	1.8	5.4	7.5	-1.9
253	Public building and related furniture	52	12.3	13.7	-1.3	8.1	10.0	-1.7
254	Partitions and fixtures	90	4.7	3.4	1.3	9.8	7.4	2.2
259	Miscellaneous furniture and fixtures	41	4.0	1.5	2.5	5.2	5.1	0.1
261	Pulp mills	12	0.7	1.1	-0.4	-13.5	-11.6	-2.2
262	Paper mills	146	2.0	1.2	0.8	-0.8	-2.0	1.2
263	Paperboard mills	48	4.9	2.9	1.9	1.1	0.5	0.7
265	Paperboard containers and boxes	219	4.4	1.8	2.6	3.5	2.2	1.3
267	Miscellaneous converted paper products	243	3.5	2.4	1.1	4.3	3.0	1.2
271	Newspapers	442	1.2	-3.9	5.3	4.0	2.0	1.9
272	Periodicals	144	4.1	-1.2	5.4	12.7	9.3	3.1
273	Books	125	5.4	1.8	3.6	5.0	1.2	3.7
274	Miscellaneous publishing	91	1.9	1.2	0.7	21.9	9.3	11.4

See footnote at end of table.

Table 4. Annual percent change in total compensation, output, and unit labor costs: manufacturing industries, 1990-95 and 1995-99

Continued								
SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-95			Annual percent change 1995-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
275	Commercial printing	570	3.3	1.5	1.8	4.0	2.1	2.0
276	Manifold business forms	43	-1.5	-5.8	4.5	-0.5	-2.2	1.7
277	Greeting cards	26	-0.9	-1.1	0.2	2.7	3.0	-0.3
278	Blankbooks and bookbinding	63	2.6	1.6	1.0	0.6	0.7	-0.1
279	Printing trade services	49	0.7	0.0	0.7	-1.8	-1.3	-0.4
281	Industrial inorganic chemicals	72	-0.7	-1.5	0.9	2.3	7.3	-4.7
282	Plastics materials and synthetics	155	3.3	2.8	0.5	-0.6	2.3	-2.8
283	Drugs	295	5.7	2.9	2.7	5.6	2.3	3.3
284	Soaps, cleaners, and toilet goods	160	2.3	1.9	0.4	3.4	1.1	2.3
285	Paints and allied products	52	4.4	0.3	4.1	1.5	0.1	1.4
286	Industrial organic chemicals	127	3.5	-1.7	5.3	1.3	-0.3	1.6
287	Agricultural chemicals	55	2.0	-0.1	2.1	0.8	0.8	0.0
289	Miscellaneous chemical products	91	2.5	0.9	1.6	4.0	3.7	0.3
291	Petroleum refining	89	4.0	1.2	2.8	0.8	1.5	-0.7
295	Asphalt paving and roofing materials	31	2.8	2.0	0.8	3.0	4.9	-1.9
299	Miscellaneous petroleum and coal products	14	4.2	0.9	3.3	1.0	2.0	-1.0
301	Tires and inner tubes	80	4.4	4.4	0.0	1.6	1.6	-0.1
305	Hose and belting and gaskets and packing	74	4.7	4.0	0.6	5.2	4.6	0.6
306	Fabricated rubber products, n.e.c.	107	4.0	3.6	0.4	3.7	3.2	0.5
308	Miscellaneous plastics products, n.e.c.	740	5.9	5.6	0.3	5.2	5.1	0.2
314	Footwear, except rubber	33	-3.1	-3.6	0.5	-5.7	-8.5	3.1
321	Flat glass	16	0.0	1.7	-1.7	1.3	5.9	-4.3
322	Glass and glassware, pressed or blown	64	1.0	0.2	0.9	0.4	1.4	-1.0
323	Products of purchased glass	64	5.6	4.0	1.5	5.2	7.4	-2.0
324	Cement, hydraulic	17	2.4	2.1	0.2	4.8	2.8	1.9
325	Structural clay products	32	1.6	0.0	1.6	1.1	1.3	-0.2
326	Pottery and related products	38	4.9	4.1	0.8	0.4	0.8	-0.4
327	Concrete, gypsum, and plaster products	240	3.1	0.6	2.5	8.4	6.9	1.5
329	Miscellaneous nonmetallic mineral products	73	3.2	2.2	0.9	2.8	1.2	1.5
331	Blast furnace and basic steel products	228	1.6	3.1	-1.4	-1.0	-0.3	-0.7
332	Iron and steel foundries	128	2.2	1.9	0.3	2.7	2.1	0.6
333	Primary nonferrous metals	37	0.1	-1.3	1.4	-0.3	2.8	-3.1
335	Nonferrous rolling and drawing	168	2.7	1.3	1.3	3.6	5.4	-1.7
336	Nonferrous foundries (castings)	95	4.7	4.1	0.6	4.6	5.5	-0.9
339	Miscellaneous primary metal products	28	2.0	7.6	-5.2	4.7	-1.1	5.8
341	Metal cans and shipping containers	36	-1.8	-0.6	-1.2	-0.4	0.9	-1.3
342	Cutlery, handtools, and hardware	122	3.3	2.6	0.7	2.1	1.5	0.5
343	Plumbing and heating, except electric	59	3.4	0.8	2.6	5.0	5.4	-0.4
344	Fabricated structural metal products	484	2.3	1.8	0.4	7.2	4.7	2.4
346	Metal forgings and stampings	254	4.0	6.0	-1.9	2.8	4.2	-1.4
347	Metal services, n.e.c.	143	5.2	5.7	-0.5	4.5	2.9	1.6
348	Ordinance and accessories, n.e.c.	41	-7.6	-6.1	-1.6	-4.1	-3.7	-0.4
349	Miscellaneous fabricated metal products	271	4.6	3.4	1.1	3.7	2.5	1.1
351	Engines and turbines	86	1.9	3.1	-1.2	1.2	4.9	-3.5

See footnote at end of table.

Table 4. Annual percent change in total compensation, output, and unit labor costs: manufacturing industries, 1990-95 and 1995-99
Continued

SIC code	Industry	1999 Employment ¹ (thousands)	Annual percent change, 1990-95			Annual percent change 1995-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
352	Farm and garden machinery	99	3.0	2.1	0.9	1.9	-2.6	4.6
353	Construction and related machinery	244	1.9	2.7	-0.8	5.7	4.6	1.0
354	Metalworking machinery	338	4.2	3.7	0.5	2.9	1.1	1.8
355	Special industry machinery	169	5.9	6.3	-0.4	0.9	0.2	0.7
356	General industrial machinery	255	3.5	2.4	1.1	2.9	0.2	2.7
357	Computer and office equipment	370	-0.1	22.6	-18.5	4.0	41.9	-26.8
358	Refrigeration and service machinery	214	4.5	5.3	-0.8	4.3	3.4	0.9
359	Industrial machinery, n.e.c.	367	6.7	6.7	0.0	2.3	1.1	1.2
361	Electric distribution equipment	83	4.2	2.9	1.3	0.6	0.9	-0.3
362	Electrical industrial apparatus	151	4.4	5.5	-1.0	2.3	0.8	1.4
363	Household appliances	118	4.1	3.8	0.3	2.9	3.6	-0.7
364	Electric lighting and wiring equipment	183	2.7	2.0	0.7	3.2	4.6	-1.3
366	Communications equipment	267	2.8	10.3	-6.9	8.9	12.7	-3.3
367	Electronic components and accessories	636	5.4	25.0	-15.7	4.6	30.7	-20.0
369	Miscellaneous electrical equipment & supplies	151	1.8	3.9	-2.0	2.3	4.4	-2.0
371	Motor vehicles and equipment	1019	6.3	5.5	0.8	3.5	7.6	-3.8
372	Aircraft and parts	495	-4.7	-7.2	2.8	4.2	9.5	-4.8
373	Ship and boat building and repairing	166	-1.2	-3.8	2.7	1.9	4.2	-2.2
374	Railroad equipment	37	3.7	5.0	-1.2	5.6	6.0	-0.4
375	Motorcycles, bicycles, and parts	20	20.7	14.4	5.5	3.2	-0.2	3.3
376	Guided missiles, space vehicles, parts	88	-10.5	-11.2	0.8	0.0	3.7	-3.6
381	Search and navigation equipment	166	-4.6	-5.5	0.9	-1.1	-0.9	-0.3
382	Measuring and controlling devices	294	2.5	4.3	-1.7	2.3	1.4	0.9
384	Medical instruments and supplies	283	6.2	3.8	2.3	6.2	7.1	-0.8
385	Ophthalmic goods	34	2.6	3.5	-0.8	4.0	6.6	-2.4
386	Photographic equipment & supplies	74	-0.3	0.8	-1.1	-0.8	-0.3	-0.6
391	Jewelry, silverware, and plated ware	50	-0.4	-0.4	0.0	5.8	7.4	-1.6
393	Musical instruments	17	5.4	1.1	4.3	6.4	2.4	3.9
394	Toys and sporting goods	105	5.4	3.7	1.7	0.4	-0.4	0.8
395	Pens, pencils, office, and art supplies	31	4.0	1.0	2.9	-0.8	-2.2	1.4
396	Costume jewelry and notions	20	2.2	0.6	1.6	-3.1	-5.5	2.6
399	Miscellaneous manufactures	173	4.1	2.1	2.0	4.6	4.3	0.4

¹ Employment figures are based on data from BLS sources.